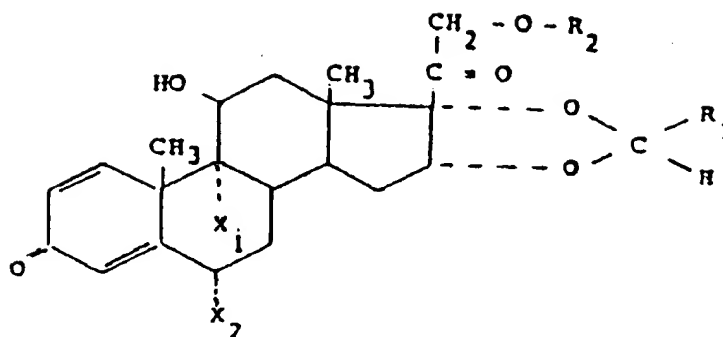


In the Claims:

1. A compound of the formula



in the form of an R epimer, an S epimer, or a stereoisomeric mixture of the R and S epimers in terms of the orientation of the substituents on the carbon atom at position 22, wherein:

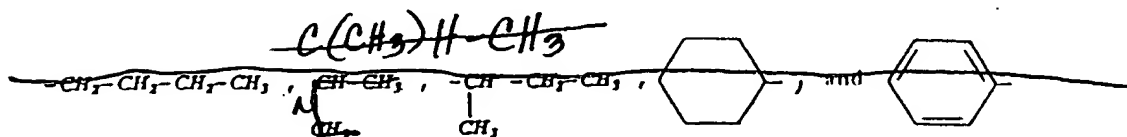
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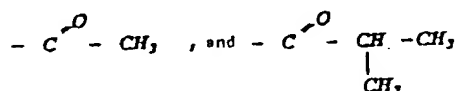
E

cyclohexyl,

R<sub>1</sub> is a member selected from the group consisting of



R<sub>2</sub> is a member selected from the group consisting of



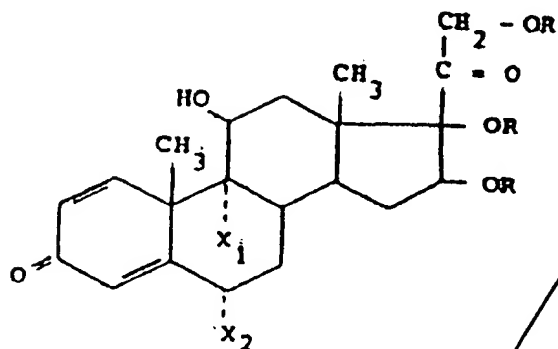
and wherein X<sub>1</sub> and X<sub>2</sub> may be the same or different and each is a member selected from the group consisting of hydrogen and fluorine.

10

2. A compound according to claim 1 in the form of the (22S)- epimer.

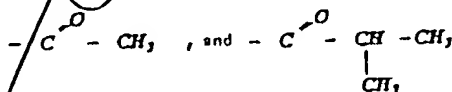
3. A compound according to claim 1 in the form of the (22R)- epimer.

4. A process for the preparation of compounds of claim 1, comprising the steps of hydrolysis-ketalization of a compound of formula



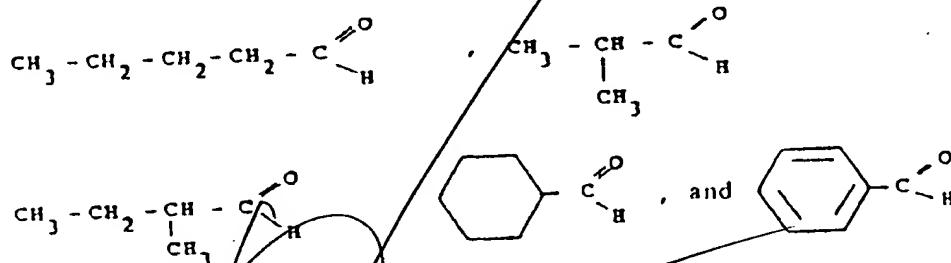
wherein R is a member selected from the group consisting of

5



and wherein X<sub>1</sub> and X<sub>2</sub> may be the same or different and each is a member selected from the group consisting of hydrogen and fluorine with an anhydrous solvent is a

member selected from the group solvent consisting of  
10 dioxane, methylene chloride, and chloroform, containing  
dissolved therein from about 10 to about 15 wt% hydrogen  
chloride gas, to selectively hydrolyze the ester groups  
at C-16 and C-17; reacting said hydrolyzed product at  
room temperature with an aldehyde is a member selected  
15 from the group consisting of



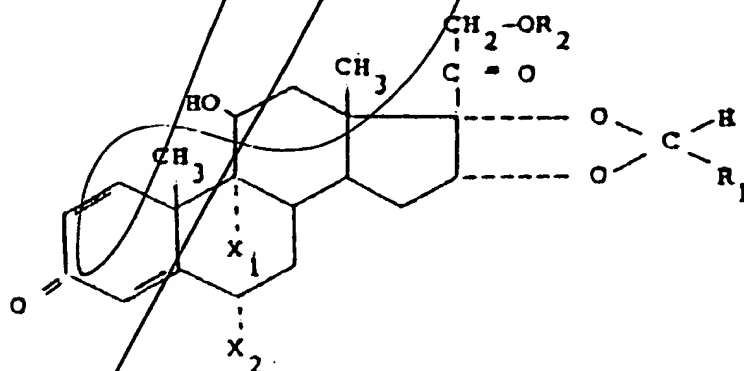
to form the corresponding ketals between said C-16 and C-  
17, said reaction being conducted in the presence of a  
perchloric acid catalyst to obtain a mixture of epimers  
of the compound of claim 1 wherein the S-R epimer  
20 proportions are in the range from about 40:60 to about  
60:40.

5. The process of claim 4 including the added  
step of recrystallizing said product from a mixture of  
ethanol and acetone.

6. The process according to claim 5 wherein said ethanol/acetone mixture is in the proportion of about 5 parts by volume of ethanol to about 3 parts by volume of acetone.

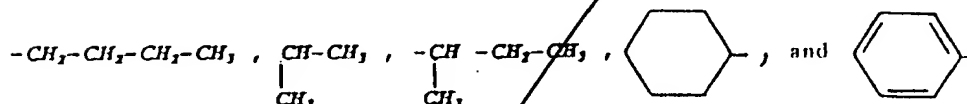
7. The process according to claim 5 wherein about 16 ml of said ethanol/acetone mixture is used for every 1 gm of product.

8. A process for the preparation of compounds of formula

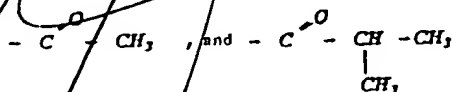


in which the said formula represents the S epimer corresponding to the asymmetric center at C-22 wherein:

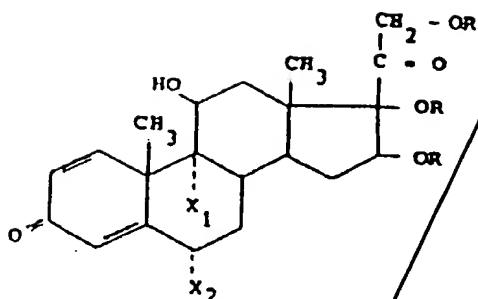
5  $R_1$  is a member selected from the group consisting of



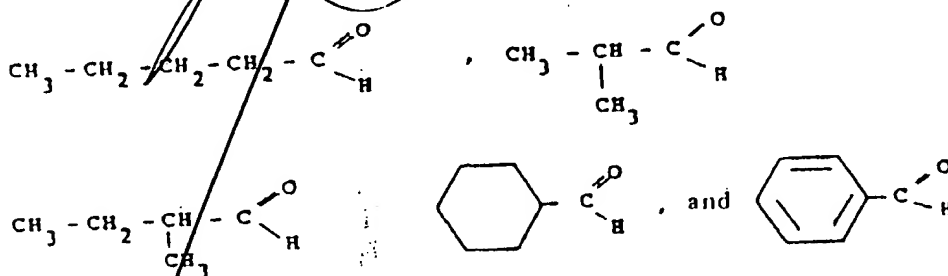
$R_2$  is a member selected from the group consisting of



10 and wherein  $X_1$  and  $X_2$  may be the same or different and each is a member selected from the group consisting of hydrogen and fluorine, the steps comprising the hydrolysis-ketalization of compounds of formula



with anhydrous solvent selected from the group consisting of dioxane, methylene chloride, and chloroform, said solvent containing dissolved therein from about 10 to about 15 wt% hydrogen chloride gas, to selectively hydrolyze the ester groups at C-16 and C-17; reacting said hydrolyzed product at room temperature with an aldehyde is a member selected from the group consisting of



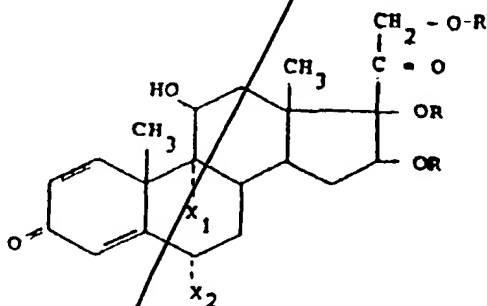
20 to form the corresponding ketals between said C-16 and C-17, said reaction being conducted in the presence of a p-toluensulfonic acid catalyst to obtain the (22s)-epimer of the compound of claim 1.

9. The process of claim 8 including the added step of recrystallizing said product from a mixture of ethanol and acetone.

10. The process according to claim 9 wherein said ethanol/acetone mixture is in the proportion of about 5 parts by volume of ethanol to about 3 parts by volume of acetone.

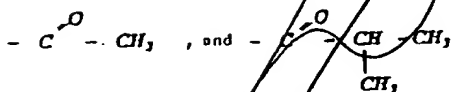
11. The process according to claim 9 wherein about 16 ml of said ethanol/acetone mixture is used for every 1 gm of product.

12. An intermediate compound for the preparation of compounds according to claim 1, characterized by the formula





wherein R is a member selected from the group consisting  
5 of



13. An anti-inflammatory drug corresponding to  
the novel composition of claim 1.

14. A therapeutic application of a compound  
according to claim 1 based on anti-inflammatory  
pharmacologic activity and characterized by:

5 Low systemic glucocorticoid effect;  
Topical pharmacologic activity greater than  
reference standards;  
Therapeutic indexes above those found for  
reference compounds.

15. A drug with topical glucocorticoid  
pharmacologic activity, comprising a composition  
according to claim 1.

16. A method for the treatment and control of inflammatory conditions in mammals, including humans, characterized by the topical administration of an effective dose of the compound according to claim 1.

add  
a3

add  
re